

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

CHRISTOPHER J. FREITAS ET AL.

Serial No.: 10/782,634

Filed: February 18, 2004

For: N-PHASE INTERFACE

TRACKING METHOD UTILIZING UNIQUE ENUMERATION OF

MICROGRID CELLS

**GROUP ART UNIT:** 

**EXAMINER:** 

P.O. Box 6006 San Ramon, CA 94583-0806

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted pursuant to 37 CFR §§ 1.56, 1.98 and 1.97, particularly 1.97(c). The documents listed on the attached Forms PTO/SB/08A and PTO/SB/08B are brought to the Examiner's attention.

I hereby certify that I have a reasonable basis for believing that this correspondence will be deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents,

P. O. Box 1450, Alexandria, VA 22313-1450, on <u>May 5, 2004</u>
Date of Deposit

Nancy Cantero

May 5, 2004

Date

Information Disclosure Statement USSN 10/782,634 Page 2

Copies of the foreign patent and non-patent literature documents are enclosed.

Respectfully submitted,

Richard J. Schulte Attorney for Applicants

Reg. No. 35,350 (925) 842-1476

RJSchulte:ncc Enclosures

May 5, 2004

PTO/SB/08a (08-03)

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STATEMENT BY APPLICANT

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of 2

Sheet

Complete if Known			
Application Number	10/782,634		
Filing Date	FEBRUARY 18, 2004		
First Named Inventor	CHRISTOPHER J. FREITAS		
Art Unit			
Examiner Name			
Attorney Docket Number	T-6264		

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No.1	Document Number  Number - Kind Code² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
	AA	US - 5,072,404	12-10-1991	Schmitzer et al.	Figures Appear
	AB	US - 5,315,530	05-24-1994	Gerhardt et al.	
	<u> </u>	US - 5,455,780	10-03-1995	Nguyen et al.	
	AC	US = 5,537,641	07-16-1996	da Vitoria Lobo et al.	
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<del></del>	AR	US-	-		

	FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> ( <i>if known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Τ <sup>6</sup>	
	BA						
	BB						
	BC	_					
	BD						
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/782,634

Filing Date FEBRUARY 18, 2004

First Named Inventor CHRISTOPHER J. FREITAS

Art Unit Examiner Name

Attorney Docket Number T-6264

(Use as many sheets as necessary)

Sheet 2 of 2 Attorney Docket Number

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	HIRT, C.W., and NICHOLS, B.D., Volume of Fluid (VOF) Method for the Dynamics of Free Boundaries, <i>Journal of Computational Physics</i> , Volume 39, 201-225, 1981.	
	СВ	RIDER, W.J., and KOTHE, D.B., Reconstructing Volume Tracking, <i>Journal of Computational Physics</i> , Volume 141, 112-152, 1998.	
	СС	GUEYFFIER, D., LI, J., NADIM, A., SCARDOVELLI, R., and ZALESKI, S., Volume-of-Fluid Interface Tracking With Smotthed Surface Stress Methods for Three Dimensional Flows, <i>Journal of Computational Physics</i> , Volume 152, 423-456, 1999.	
		SCARDOVELLI, R., and ZALESKI, S., Analytical Relations Connecting Linear Interfaces and Volume Fractions in Rectangular Grids, <i>Journal of Computational Physics</i> , Volume 164, 228-237, 2000.	
	CE	UDAYKUMAR, H.S., MITTAL, R., and RAMPUNGGOON, P., Interface Tracking Finite Volume Method for Complex Solid-Fluid Interactions on Fixed Meshes, <i>Communications in Numerical Methods in Engineering</i> , Volume 18, 89-97, 2002.	
CF		DAI, M., WANG, H., PEROT, J.B., and SCHMIDT, D.P., A Numerical Method for Interface Tracking, <i>ILASS Americas</i> , 15 <sup>th</sup> Annual Conference on Liquid Atomization and Spray Systems, Madison, WI, May 2002.	
	CG	SCARDOVELLI, R., AULISA, E., MANSERVISI, S., and MARRA, V., A Marker-VOF Algorithm for Incompressible Flows With Interfaces, <i>Proceedings of ASME FEDSM'02, ASME 2002 Fluids Engineering Division Summer Meeting, Montreal, Quebec, Canada, FEDSM'2002-31241</i> , 1-6, July 14-18, 2002.	
	СН	GAO, D., MORLEY, N.B., and DHIR, V., Numerical Simulation of Wavy Falling Film Flow Using VOF Method, Journal of Computational Physics, Volume 192, 624-642, 2003.	
	CI		

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